

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT:

YOSHIDA, AKITO

DOCKET NO.:

W2K1077

SERIAL NO:

10/082,472

**EXAMINER:** 

ZARNEKE

FILED:

02/22/2002

ART UNIT:

2827

TITLE:

A STACKING STRUCTURE FOR SEMICONDUCTOR DEVICES

USING A FOLDED OVER FLEXIBLE SUBSTRATE AND METHOD

THEREFOR

Assistant Commissioner

for Patents Washington, D.C. 20231 Weiss & Moy, P.C.

4204 North Brown Avenue

Scottsdale, Arizona 85251-3989

December 11, 2002

I hereby certify that on the  $11^{th}$  day of December, 2002, this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231.

FECHNOLOGY CENTER 2800

Dear Sir:

## AMENDMENT LETTER

This is in response to the Office Action dated October 18, 2002 in regards to the above identified patent application. Please amend the subject patent application as follows:

## IN THE CLAIMS

Please cancel Claims 13-20 without prejudice or disclaimer.

Please add the following new Claims:

New Claim 21. A semiconductor stacking structure comprising: a first semiconductor device; and

means coupled to a bottom surface of the first semiconductor device for forming the semiconductor stacking structure wherein the means is folded over on at least two sides to form flap portions which are coupled to an upper surface of the first semiconductor device and covers only a portion of the upper surface of the first semiconductor device.

New Claim 22. A semiconductor stacking structure in accordance with Claim 21 further comprising means placed on the flap portions of the flexible substrate for coupling the flap portions to the first semiconductor device.

New Claim 23. A semiconductor package in accordance with Claim 21 further comprising means placed on the upper surface of the first semiconductor device for coupling the flap portions to the first semiconductor device.

New Claim 24. A semiconductor stacking structure in accordance with Claim 21 further comprising a second semiconductor device coupled to the flap portions of the means.

New Claim 25. A semiconductor stacking structure in accordance with Claim 24 wherein the second semiconductor device is coupled to the flap portions of the means after the flap portions are folded over and coupled to the first semiconductor device.

New Claim 26. A semiconductor stacking structure in accordance with Claim 24 wherein the second semiconductor device is coupled to the flap portions of the means before the flap portions are folded over and coupled to the first semiconductor device.

New Claim 27. A semiconductor stacking structure package in accordance with Claim 21 wherein the semiconductor stacking structure is a LGA (Land Grid Array) device.

New Claim 28. A semiconductor stacking structure in accordance with Claim 21 wherein the semiconductor stacking structure is a BGA (Ball Grid Array) device.

## REMARKS

The Examiner has requested a restriction requirement directed to pending Claims 1-20. The Examiner alleges that the application contains claims directed to the following distinct species of the claimed invention: Claims 1-12 (Invention I) drawn to a product; and Claims 13-20 (Invention II) drawn to a process. The Examiner alleges that Invention I and Invention II claims define patentably distinct inventions.

We respectfully traverse this restriction requirement. Applicants respectfully submit that the Claims are interrelated to one another and should be prosecuted as part of the same application. The claims relate to a semiconductor structure and a method of manufacturing the semiconductor structure. However, in order to fully respond to the Examiner's restriction requirements, Applicants have elect to prosecute Claims 1-12 (Invention I) in the subject patent application. Claims 13-20 have been cancelled without prejudice or disclaimer and replaced with new Claims 21-28 which are drawn to the same species as Invention I.

No additional fees should be incurred by the addition of the new Claims since the total number of Claims being prosecuted remain at 20. If there are any fees incurred by this Amendment Letter, please deduct them from our Deposit Account NO. 23-0830.

Respectfully submitted,

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